



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,314	04/24/2001	Keith Clark	LINCP103US	6029

7590 01/12/2007  
Himanshu S. Amin  
Amin & Turocy, LLP  
National City Center  
1900 E. 9th Street, 24th Floor  
Cleveland, OH 44114

EXAMINER
----------

BHATTACHARYA, SAM

ART UNIT	PAPER NUMBER
----------	--------------

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 09/841,314	Applicant(s) CLARK ET AL.	
	Examiner Sam Bhattacharya	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-12, 20, 22 and 25-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20, 26 and 29 is/are allowed.
- 6) ☒ Claim(s) 7-12, 22, 25, 27, 28, 30 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 7-12, 22, 25, 27, 28, 30 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Blankenship (US 6,624,388).

Regarding claim 7, Blankenship discloses a welding system, including a first welding cell including at least one welding node 20, 24, 28, 304 having a wireless communications interface 68; and, at least one other welding cell 20, 24, 28, 30, 304, 310 including at least one welding node having a wireless communications interface 68 wherein the at least one welding node of the first welding cell and the at least one welding node of the at least one other welding cell communicate wirelessly with each other via a frequency adjusting wireless communication protocol, and at least one factory control by a local factory Intranet that retains weld procedures for the first welding cell and the at least one other welding cell. See FIGS. 1 and 2, col. 7, lines 19-32, col. 8, lines 16-47 and col. 17, lines 24-48.

Regarding claim 8, Blankenship discloses that the at least one welding node of the first welding cell and the at least one welding node of the at least one other welding cell communicate wirelessly utilizing one of Bluetooth, ConnexRF and point-to-multipoint short-range RF (radio frequency) format. See col. 6, line 54 – col. 7, line 18.

Regarding claim 9, Blankenship discloses the at least one welding node of the first welding cell and the at least one welding node of the at least one other welding cell communicate

wirelessly utilizing Bluetooth format via at least one of RFComm, OBEX, Service Discovery Protocol and logical link control and adaptation protocols. See col. 6, line 54 – col. 7, line 18.

Regarding claim 10, Blankenship discloses that the at least one welding node of the first welding cell and the at least one welding node of the at least one other welding cell are one of a power source, a gas controller, a wire feeder, a contact tip, a dresser, a gas mixer, a gas sneezer, a gas controller, a clamp actuator, a robot arm/beam/torch manipulator, a laser seam tracker, a wire drive and gun, a water cooler, a welder, a part handler, a torch travel and a user control. See col. 3, lines 47-63.

Regarding claim 11, Blankenship discloses that the at least one welding node of the first welding cell and the at least one welding node of the at least one other welding cell communicate wirelessly utilizing a format that provides frequency spread spectrum hopping or direct sequence spread spectrum. FIGS. 1 and 2, col. 7, lines 19-32 and col. 8, lines 16-47.

Regarding claim 12, Blankenship discloses that information communicate between the at least one welding node of the first welding cell and the at least one welding node of the at least one other welding cell is at least one of weld procedures, parameters, diagnostic information, error logs, machine metrics, system metrics, specifications, manuals, machine enhancements, files for specific user application and sensor feedback. See col. 3, lines 11-25.

Regarding claim 22, Blankenship disclose a method for providing wireless communications in a welding system including generating an RF field around a first welding node; generating an RF field around at least one other welding node; establishing communication between the first welding node and the at least one other welding node via a frequency adjusting wireless communication protocol; the at least one other welding node receiving information

Art Unit: 2617

wirelessly from the first welding node, the at least one other welding node transmitting information wirelessly to the first welding node; and storing information communicated between the first welding node and the at least one other welding node in a central location 190. See FIGS. 1-4, col. 7, lines 19-32, col. 8, lines 16-47 and col. 9, line 63 – col. 10, line 17.

Regarding claim 25, Blankenship discloses a wireless signal for communicating welding information, including a first welding node having a wireless communications interface adapted to communicate via a wireless signal utilizing a frequency adjusting wireless communication protocol; at least one other welding node having a wireless communications interface adapted for wireless communication with the first welding node via the wireless signal; and a server having a wireless communications interface that maintains information associated with the first welding node and the at least one other welding node. See FIGS. 1-4, col. 7, lines 19-32, col. 8, lines 16-47 and col. 9, line 63 – col. 10, line 17.

Regarding claim 27, Blankenship discloses that the at least one factory control transmits at least one of a time of a weld procedure and a change of a weld procedure wirelessly to the first welding cell and the at least one other welding cell. See col. 17, lines 39-48.

Regarding claim 28, Blankenship discloses that the at least one factory control retrieves information from the first welding cell and the at least one other welding cell and initiates an action based upon the retrieved information. See col. 11, line 64 – col. 12, line 23.

Regarding claim 30, Blankenship discloses that the maintained information is at least one of weld procedures, parameter, diagnostic information, error logs, machine metrics, system metrics, specifications, manuals, machine enhancements, files for specific user application and sensor feedback. FIGS. 1 and 2, col. 7, lines 19-32 and col. 8, lines 16-47.

Art Unit: 2617

Regarding claim 31, Blankenship discloses that the server is a repository of weld procedures for the factory. See col. 10, lines 1-7.

***Allowable Subject Matter***

3. Claims 20, 26 and 29 are allowed.

4. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to disclose the recited combination of elements in a method for providing wireless communication in a welding system including placing at least one of the welding nodes into a fail safe condition if a communications error threshold has been exceeded and continuing the weld process if the threshold has not been exceeded, as in claims 20 and 26, and dependent claim 29.

***Response to Arguments***

5. Applicant's arguments filed 10/29/06 have been fully considered but they are not persuasive.

Examiner respectfully disagrees with Applicants arguments regarding the rejection of claims 7-12, 22, 25, 27, 28, 30 and 31 are rejected under 35 U.S.C. 102(e).

Regarding claim 7, 22 and 25, Blankenship teaches a welding system, including a first welding cell including at least one welding node 20, 24, 28, 304 having a wireless communications interface 68; and, at least one other welding cell 20, 24, 28, 30, 304, 310 including at least one welding node having a wireless communications interface 68 wherein the at least one welding node of the first welding cell and the at least one welding node of the at least

one other welding cell communicate wirelessly with each other via a frequency adjusting wireless communication protocol. See FIGS. 1 and 2, col. 7, lines 19-32 and col. 8, lines 16-47.

Accordingly, Blankenship does disclose at least one welding factory control that retains weld procedures for a first welding cell and at least one other welding cell; storing information communicated between the first welding node and the at least one other welding node in a central location, or a server having a wireless communications interface that maintains information associated with a first welding node and at least one other welding node, as recited in the claims.

### *Conclusion*

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2617

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Bhattacharya whose telephone number is (571) 272-7917.

The examiner can normally be reached on Weekdays, 9-6, with first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sb

  
GEORGE ENG  
SUPERVISORY PATENT EXAMINER